

DP-305003

REMARKS

Claims 21 – 32 are pending in the present Application. Claims 21, 26 – 29, and 31 have been amended, leaving Claims 21 – 32 for consideration upon entry of the present Amendment. Applicants respectfully request this amendment be entered because 1) they do not raise new issues that would require further consideration and/or search; 2) they do not raise issues of new matter; 3) no new claims have been added; and 4) the amendment places the claims in a better condition for allowance. All of the amendments have been made to address the claim objections and the questions of indefiniteness and not to overcome art of record. No new matter has been introduced by these amendments or new claims. Specific support for the amendments to the claims is set forth below.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Drawing Objections

The drawings were objected to because they did not show the insulation as claimed in Claims 23, 30, and 32, the outer and inner wall as in Claim 21, a double wall end cone as claimed in Claims 25 and 31, and the gasket as claimed in Claim 29. New Figure 11 is submitted herewith to further illustrate the claims. Support for Figure 11 can at least be found in Figure 10 and the description thereof, as well as in the Example, and the claims as originally filed. Further explanation of the support can be found in the discussion of the 35 U.S.C. §112 rejection below. Acceptance of the figure and reconsideration and withdrawal of this objection are respectfully requested.

Claim Objections

Claims 26 and 29 were objected to due to informalities. These claims have been amended as suggested in the Final Office Action dated August 3, 2005 (hereinafter FOA), thereby rendering these objections moot. Reconsideration and withdrawal of this objection are respectfully requested.

DP-305003

Claim Rejections Under 35 U.S.C. §112, second paragraph

Claims 21 – 32 stand rejected under 35 U.S.C. §112, second paragraph.

In Claim 21, it is allegedly unclear what is intended by "exhaust system component", and "interior portion of the component". This claim has been amended to replace "component" in line 5 with "shell". Similar amendments have been made to Claims 27, 28, and 31. These amendments clarify the claims. It is clear that the present claim covers any exhaust system component comprising the recited limitations and is not limited to catalytic converters.

In Claims 23, 30, and 32, it is allegedly unclear as to the recitation of the insulation disposed in physical contact with the bushing. In the specification as originally filed, it is stated that

The mat insulating material typically between the inner and outer housing layers of the converter endcone should be protected from the exhaust gases in order to maintain control of the outer skin temperature as well as prevent erosion of the insulation material sandwiched between the outer and inner cone surfaces. Therefore, it is preferred in mounting the oxygen sensor in the endcone to fabricate a bushing accomplishing a seal between the inner and outer endcones....

In a double-walled construction, such as a typical endcone arrangement, preferably, the extruded skirt material formed when penetrating the outer wall merges with the upset material formed when penetrating the inner wall, so as to result in a continuous connection between the two walls, that can be tapped to accept a threaded connector of an oxygen sensor.

(Page 2, line 28 – Page 3, line 3 and lines 19 – 24; as originally filed, Pages 4 – 5 of the Response Filed May 20, 2005). It is additionally stated that

The... endcone assembly 30, which consists of an outer surface material, an inner cone 40, and a mat material therebetween, was fabricated with a precut, 25 mm hole 42 located in the inner end cone 40 and through the mat material.

(Page 8, lines 13 – 16) From these descriptions, it is clear that a double walled construction where the insulation is disposed between the inner and outer wall was disclosed, as well as formation of the bushing from the shell, such that the insulation between this outer and inner walls is in physical contact with the bushing.

Support for Claim 24 can at least be found in Claim 2 as originally filed. The specification has been amended in accordance with Claim 2 as originally filed.

DP-305003

Support for Claim 25 can at least be found on Page 3, lines 19 – 24, as originally filed.

Support for Claims 29 and 31 can at least be found in Claim 7 and Page 6, lines 12 – 25 as originally filed, and as on Pages 4 and 6 of the Response Filed May 20, 2005.

Regarding Claim 28, its dependency has been changed for further clarity.

Based upon the above remarks and the amendments to the claims, reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections Under 35 U.S.C. §102(b)

Claims 21 – 26, and 30 stand rejected under 35 U.S.C. §102(b), as allegedly anticipated by EP 992,659 (corresponding to U.S. Patent No. 6,555,070) to Krüger. Applicants respectfully traverse this rejection.

To anticipate a claim, a reference must disclose each and every element of the claim.

Lewmar Marine v. Varient Inc., 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

It is alleged that Krüger discloses “a shell having an outer wall and an inner wall, wherein the shell forms a bushing 59 defining an opening through and connects the outer wall and the inner wall...”. (FOA, Page 5) However, bushing 59 is not “formed by the shell”, but is welded to the shell.

A metal bush 59, which is made from steel, has a continuous axial hole with an internal screw thread, projects through holes, which are arranged upstream of the catalyst means 41, in the shells 25, 26 and 46 and is tightly welded to these shells.

(Col. 8, lines 63 – 67; *emphasis added*) Hence, the shells of Krüger do not form the bush 59; the bush 59 is welded to the shells.

The present claims are directed to “a shell having an outer wall and an inner wall, wherein the shell forms a bushing that defines an opening through and connects the outer wall and the inner wall...”. (Claim 21; *emphasis added*)

It is also noted that the bush 59 is not disposed in a double walled end cone.

For at least the reason that bush 59 of Krüger is not formed from the shell, but is welded to the shells, Krüger is missing at least one element of the present claims. Hence, Krüger fails to anticipate the present claims.

Reconsideration and withdrawal of this rejection are respectfully requested.

DP-305003

Claim Rejections Under 35 U.S.C. §103(a)

Claims 27 and 28 stand rejected under 35 U.S.C. §103(a), as allegedly unpatentable over Krüger in view of U.S. Patent No. 5,615,551 to Matsushima. Claim 29 stands rejected under 35 U.S.C. §103(a), as allegedly unpatentable over Krüger in view of U.S. Patent No. 4,883,643 to Nishio et al. Claims 31 and 32 stand rejected under 35 U.S.C. §103(a), as allegedly unpatentable over Krüger in view of Matsushima and Nishio et al. Claims 21 – 28 and 30 stand rejected under 35 U.S.C. §103(a), as allegedly unpatentable over Matsushima in view of Krüger. Applicants respectfully traverse these rejections.

Matsushima is relied upon to teach a catalytic converter unit 10, a bushing "provided in a shell wall of end cone of said catalytic converter unit" and an oxygen sensor. (FOA, Pages 7 – 8). Matsushima is further relied upon for provision of an oxygen sensor 36 being positioned in the endcone at an angle of less than 90 degrees to the centerline of the catalytic converter component. (FOA, pages 6 and 8) It is not even alleged in the FOA that Matsushima teaches "a shell having an outer wall and an inner wall, wherein *the shell forms a bushing* that defines an opening through and connects the outer wall and the inner wall", as is claimed in Claims 21 – 32 of the present application. Hence, regardless of what Matsushima teaches with respect to the angle of the oxygen sensor (which Applicants do not admit is taught), Matsushima fails to remedy the deficiencies of Krüger. As with Krüger, Matsushima fails to teach "a shell having an outer wall and an inner wall, wherein the shell forms a bushing that defines an opening through and connects the outer wall and the inner wall...". (present application)

Nishio et al. are relied upon to disclose the "provision of a gasket 16 for preventing leaking". (FOA, Page 7) However, as with Krüger and Matsushima, Nishio et al. fail to teach "a shell having an outer wall and an inner wall, wherein the shell forms a bushing that defines an opening through and connects the outer wall and the inner wall...". (present application)

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness, i.e., that all elements of the invention are disclosed in the prior art. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

DP-305003

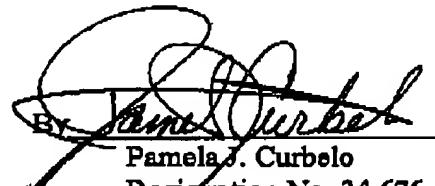
Since all of the elements of the present claims are not disclosed in the prior art, no *prima facie* case of obviousness has been established. Krüger, Matsushima, and Nishio et al., all fail to teach "a shell having an outer wall and an inner wall, wherein the shell forms a bushing that defines an opening through and connects the outer wall and the inner wall...". Although Applicants contend that an artisan would not be motivated to combine these references, Applicants note that, even combined, these references fail to teach at least one element of the present claims. Therefore, these references fail to render the present claims obvious. Reconsideration and withdrawal of these rejections are respectfully requested.

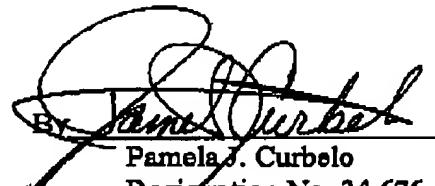
It is believed that the foregoing amendments and remarks fully comply with the Final Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and withdrawal of the objection(s) and rejection(s) and allowance of the case are respectfully requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP



By 
Pamela J. Curbelo
Registration No. 34,676

Date: September 21, 2005
CANTOR COLBURN LLP
55 Griffin Road South
Bloomfield, CT 06002
Telephone (860) 286-2929
Facsimile (860) 286-0115